EVIDENCE OF ABORIGINAL HABITATION AT YANDANOOKA

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In May 1950, aboriginal stone artefacts were discovered at Yandanooka by a party from the University Geology Department engaged on fieldwork in this area. The actual site of the discovery is near a Government windmill about two miles south-west of the Yandanooka railway siding. The artefacts were found over an area of about a quarter of an acre on the edge of the sandplain, which here lies only a short distance from the main Perth-Geraldton road.

Several types of stone artefacts were originally present, the most common being the so-called "top-grinders." These usually have a flattened grinding surface and fit comfortably into the palm of one's hand, while indentations on some of them show that they have also been used as hammer-stones. Such stones were used by the aborigines for crushing seeds and berries.

Another similar type, the "bottom-grinder", is somewhat larger but relatively rare. Specimens observed are about the size of a small dinner plate, and have a flattish appearance, being approximately oval in plan. One side, the grinding surface, has a shallow concavity, and seeds placed in this were crushed with the help of a "top-grinder."

F. D. McCarthy ("The Stone Implements of Australia," *Aust. Mus. Mem.*, IX, 1946) divides abrading stones into two groups:—(a) Millstones and (b) Mullers, which correspond to the lower and upper grinders respectively. According to this writer, millstones bear two types of grinding depressions; one which occupies the total surface, the other being in the form of a narrow groove. So far, only specimens of the former type have been found at Yandanooka. The presence of more than one grinding face on one surface of some mullers was noted by McCarthy, but as yet, no examples of this have been found here.

Other interesting fragments at the site are stone flakes and chips. Though these appear to have been produced during the fashioning of spear heads and other weapons, it is possible that some of them are themselves actual implements. A single, almost perfectly rounded stone was found, having a diameter of about two inches and bearing a curious deep T-shaped indentation. This may be some form of magic charm, possibly part of a medicine-man's tools of trade.

Unfortunately, many of the best artefacts were collected as souvenirs by students of the field-party, and therefore lost to science. On a subsequent visit to the spot it was difficult to find any worthwhile pieces. As the stones are scattered over a particularly sandy area, however, it is likely that many have become buried in the course of time due largely to wind action, and they may similarly reappear in the future.

Of great interest are the many different kinds of rock from which the artefacts were made. Such a varied assortment would

not normally be found. However, there exist nearby glacial strata of Permian age in which occur numerous boulders originally dropped into a sea from floating icebergs. It is from these boulder beds that the aborigines probably obtained their supply.

In this locality, the eastern margin of the sandplain is bordered by low cliffs about thirty feet high, and a number of permanent springs issue from the slopes. In winter this water finds its way to the lower ground where an absence of good drainage results in very wet conditions.

This plentiful supply of ground-water which owes its origin to underground drainage from the sandplain, has been utilised by both the white man and the aborigine. The former has tapped the supply by means of a Government windmill located near the site of the present discovery, while the presence of artefacts shows that, in the past, Yandanooka Springs must have been of some importance as a native watering-place.

The restricted size of the collecting area with its relatively small numbers of artefacts, indicates the probable transitory nature of aboriginal habitation at this site.

OBITUARY

O. H. SARGENT

Oswald Hewlett Sargent, Western Australian botanist, was born in England, on December 5, 1880, at Selly Oak, near Birmingham. At the age of six years he with his younger brothers and sisters were brought to Australia by his parents. During the long voyage to Australia, in the steamship *Elderslie,* Oswald was nearly washed overboard, an incident that remained vividly in his memory to the end of his long life.

After a short stay in Perth the family moved to York where the father, Obeithio Sargent, established a pharmacy. There the children received their education at the State School. After leaving school Oswald, the eldest, studied in preparation for his destined career as a chemist. He was coached for the Pharmacy Entrance examination by Mr. Walker, a retired school teacher and a very able man. Apart from this and the very real assistance of his father, Oswald gained his education by persistent reading and thought. He was extremely interested in botany, collecting a large number of texts, and applying his knowledge of classical languages and chemistry to further this study in every detail. Later when he found that many interesting botanical monographs are written in German he succeeded in teaching himself that language also. In 1902 he passed the final examinations of the Pharmacy Board, winning the first Webster Memorial Gold Medal to be awarded. His examiner, Alexander Purdie, Director of Technical Education in W.A., Lecturer in Chemistry at the Perth Technical School, and a fine botanist, was much impressed with the ability of the young examinee. He found himself referring to texts to verify some of Sargent's statements in the botanical section of his examination. Thereafter they became firm friends and Purdie's death in 1905